

Plant Disease in Kansas

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Wheat disease and yields: What may be disappointing

Special points of interest:

• Stripe rust and leaf rust continue to take yields

Harvest has started in south central and central Kansas and already we are hearing talk of reduced yields. The weather has played a significant overwhelming factor but when doesn't it. This year, the shortened growing season because of abnormally earlier and warmer weather has basically taken filling days away from the grain. Then with hot windy weather of the last two weeks, has dried down the heads and grains.

Diseases have also been prevalent in the crop and have caused their own loss. In central Kansas, wheat in the third week of May was mature and waiting on dry down. When visiting fields, on average it seemed 1/3 of the head was unfilled. Is this the weather? Not entirely, central Kansas had lots and lots of disease issues. Stripe rust, barley yellow dwarf, wheat streak mo-

saic complex, and a scattering of other diseases. BYD was probably the most significant and caused much of this head/gain loss in my estimation. The story will be repeated in many fields throughout the central corridor of wheat production. In addition, leaf rust made a late push into the state and susceptible cultivars took a beating late along with trying to compensate for heat and wind. Look for those varieties like Jagger and Post Rock to post low yields. Leaf severities from leaf rust went from 30-45 per cent in mid May to nearly 100 severity in the last few days before maturity. Eastern Kansas production has had some issue with leaf rust.

In recent travels to green wheat country this past week (WC and NW), stripe rust was present in fair amounts of 20-30% in fields in Phillips and Scott counties but as you moved west and north the impact was less. Leaf rust had a scattering of reports along

with wheat viruses such as wheat streak mosaic and barley yellow dwarf.

Bacterial leaf streak of wheat was again found in some fields as in mid May. Reports were made in Scott, Wichita, Phillips, and Sheridan counties. This disease is easily confused with stripe rust. The lesions are more or less rectangular like stripe rust but can occasionally with a filmy exudates indicating a bacterial slime. The other disease out there in an occasional field is dryland foot rot. This disease causes death of the plant and primarily the cause of those white dead plants seen in fields.

I have not seen any scab head disease to report. Eastern Kansas may have had some.

Karnal bunt survey will be focusing on central Kansas production this year. The disease has not been reported in production and been surveyed since 1993.



PLANT PROTECTION AND WEED CONTROL PROGRAM

PO BOX 19282 FORBES FIELD, BLDG 282, STREET I TOPEKA, KANSAS 66619-2180

> Phone: 785-862-2180 Fax: 785-862-2182

http://www.ksda.gov/plant% 5Fprotection/

WEB ADDRESS FOR THE PLANT PROTECTION PROGRAM

AUTHOR: JON A. APPEL PLANT PATHOLOGIST KANSAS DEPARTMENT OF AGRICULTURE

MANHATTAN, KANSAS PHONE: 785-537-3155 EMAIL: JON.APPEL@KDA.KS.GOV



Plant Protection and Weed Control Program

Plant Protection and Weed Control staff work to ensure the health of the state's native and cultivated plants by excluding or controlling destructive pests, diseases and weeds. Staff examine and analyze pest conditions in crop fields, rangelands, greenhouses and nurseries. Action taken to control potential infestations of new pests, whether they are insects, plants diseases or weeds, is beneficial to the economy and the environment.

Our Mission is to:

- Exclude or control harmful insects, plant diseases, and weeds;
- Ensure Kansas plants and plant products entering commerce are free from quarantine pests;
- Provide customers with inspection and certification services.

The Plant Disease Survey in Kansas has been conducted since 1976. The survey addresses disease situations in field crops, native ecosystems, and horticultural trade. The Kansas Department of Agriculture works cooperatively with Kansas State University and Extension programs, United States Department of Agriculture, and various commodity groups.